

THE WILSON BULLETIN

A QUARTERLY MAGAZINE OF ORNITHOLOGY

Published by the Wilson Ornithological Club

Vol. XLIII

DECEMBER, 1931

No. 4

Vol. XXXVIII (New Series) Whole Number 157

THE STATUS, BREEDING RANGE, AND HABITS OF MARIAN'S MARSH WREN

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Though we are primarily concerned with the occurrence of Marian's Marsh Wren in Alabama, and especially with its breeding habits, heretofore so little understood, our discussion will necessarily lead us into an examination of the Florida records, and of the status of those birds on the Atlantic seaboard that have been treated at one time or another under the name of "*marianae*".

We shall confine our treatment to the facts which have recently come to our notice and to the analysis of all published records of this species. There remains a great deal of work to be done, not only on the west coast of Florida and in Alabama, but particularly in all the marsh regions of South and North Carolina. This paper is presented in the hope that many observers will be prompted to make careful records of all marsh wrens in their territory.

After considerable correspondence about our Alabama marsh wrens it became evident that the question as to the breeding range of *Telmatodytes palustris marianae* in Alabama could be settled only by personal investigation. Such an investigation among the inaccessible marshes would not be possible by land. Access to the shallow waters around Mobile Bay and an examination of the tidal flats and marshes of the mainland and islands could be had only with a small vessel that could anchor in shallow water and thus allow frequent trips to the shore in a skiff. Had it not been for the exceptional courtesies shown me by Captain W. H. Edwards and his wife, of Fairhope, Alabama, the objectives of our expedition to the Gulf Coast of Alabama would never have been realized.

Captain Edwards put at our disposal for the week of June 14-20, 1931, his thirty-five foot yacht, the *Osprey*, which he himself built after the model of the *Islander*, a yawl-rigged vessel, in which Captain Harry Pigeon made his famous trip around the world. The Captain evidenced his skill not only as shipbuilder but also as navigator, for

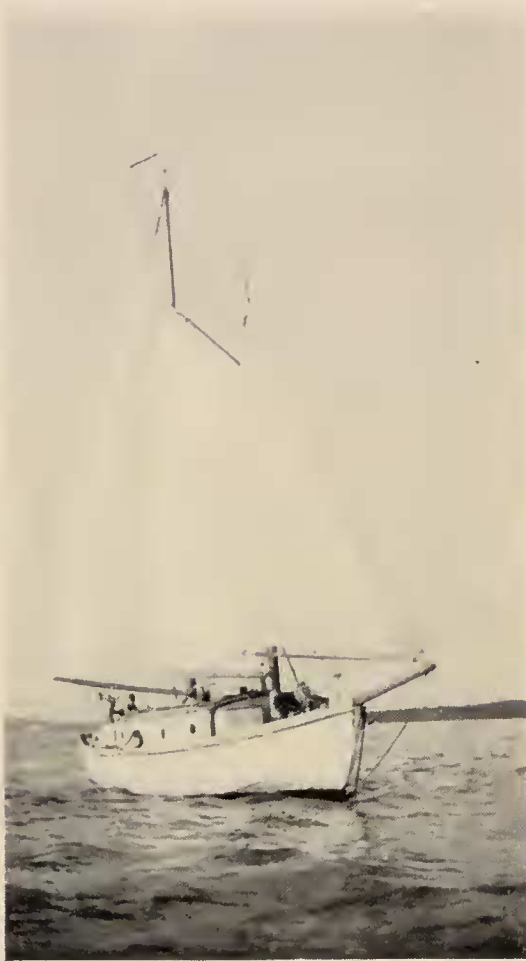


FIG. 46. The Osprey. The thirty-five foot yacht in which the expedition sailed for the breeding grounds of Marian's Marsh Wren.

section of Isle aux Herbes, Berron Point on Mon Louis Island, Heron Bayou (where we found breeding wrens in considerable number), and the eastern and western ends of Dauphin Island. Limitation of time forbade our investigation of Cat Island, Petit Bois Island, and the extensive marshes of the Mobile River delta, but an auto trip from Fairhope down the east coast of Mobile Bay to Gulf Shores yielded some important information.

I. MARIAN'S MARSH WREN IN FLORIDA

Before presenting our findings as to the breeding of Marian's Marsh Wren in Alabama it is proper to review the history of the species beginning with the notes of its discoverer, W. E. D. Scott. As we shall see, subsequent observers have given us but glimpses of the bird, and we are not sure that they correctly identified the birds which were reported under the name of *marianae*.

Marian's Marsh Wren was first discovered and described by W. E. D. Scott in 1888, his description being published in the *Auk*

he had a perfect knowledge of Mobile Bay and the Gulf shores and of their many bars and islands. In the party were the Captain's wife, well posted on the birds of the coast, his 15-year-old son Dan, Homer Flagg (a high school graduate), my wife, and our little daughter Edith. The *Osprey* was our home for the entire trip. We visited practically the entire coast of Alabama, every hour of daylight being utilized in field work ashore, or in sailing to the next anchorage.

The map will indicate the course of the yacht and the several places visited, every marsh or island offering any possibility of finding breeding marsh wrens being investigated. Beginning our course at Fairhope, we surveyed in succession Week's Bay, Navy Cove, Isle aux Herbes, Bayou La Batre, Marsh Island. another sec-



FIG. 47. A small bayou penetrating the marshes of West Heron Bay, Mobile County, Alabama. Typical breeding grounds of Marian's Marsh Wren. June 18, 1931.



FIG. 48. Typical breeding grounds of Marian's Marsh Wren. Heron Bayou, in Mobile Bay. June 18, 1931. Photographs by H. E. Wheeler.

(Vol. 5, p. 7) under the caption, "Supplementary Notes on Florida Birds". The new marsh wren was assigned to the genus *Cistothorus*.

In this article, Mr. Scott says: "The great difference between this species and *palustris* is in the conspicuous barring of the upper and under tail-coverts and the feathers of the flanks, and olive instead of rufous brown coloring throughout, with the much darker coloring of underparts.

"The new bird is quite common on all the salt marshes of this immediate vicinity (Tarpon Springs), and probably all along the coast of Florida as far north as Cedar Keys, where it is known to occur. It is probably resident and breeds, though of this I have as yet no positive knowledge".

In the Bulletin of the Nuttall Ornithological Club for 1881 (Vol. 6, p. 15), Scott reported the Long-billed Marsh Wren (*Telmatodytes palustris*) as "abundant in the salt marshes at the mouth of the Withlacoochee River".¹ The date of this observation is January, 1879, just nine years prior to the naming of *marianae*. In 1888, in his article naming *marianae*, Scott made no reference to this Withlacoochee habitat; but he did state that both *palustris* and *marianae* were associated together at the same season of the year (January), and that *marianae* was the predominant species. In all probability, then, the records of *palustris* in Citrus County in 1879 included *marianae*; and if so, this would be the earliest published reference to the wren that Scott separated in 1888.

In 1893 Scott listed his new species as a *migrant* in the Caloosahatchee region, which region is more than one hundred miles south of the Anclote Keys, and he reported that "enough representatives remain during the winter to allow the species to be regarded as resident".

In 1893, (*Auk*, Vol. 10, pp. 218-219), William Brewster separated from *palustris* a much lighter form of marsh wren from Georgia under the subspecific name, *griseus*; and in giving the measurements of ten specimens of his new subspecies, he added the measurements of an equal number of *marianae*, which he states were "selected at random from the large series" of specimens before him. Presumably these *marianae* were collected from the type locality on the west coast of Florida, but whether by Scott or by himself is not apparent. This new subspecies was called Worthington's Marsh Wren in honor of its discoverer, Mr. Willis Woodford Worthington.

¹The Withlacoochee River, which empties into the Gulf of Mexico, is between Levy and Citrus Counties, its mouth being approximately sixty miles north of the Anclote Keys. This region is now known to be a typical habitat of *marianae*.

In 1902 (*Auk*, Vol. 19, p. 353) Outram Bangs reported that *Cistothorus marianae* was an inhabitant of the "salt marshes of western Florida, non-migratory".

In the Twelfth Supplement to the A. O. U. Check-List (*Auk*, Vol. 20, p. 357, 1903) Marian's Marsh Wren is registered under the name *Cistothorus marianae*, but in the Thirteenth Supplement (*Auk*, Vol. 21, p. 418, 1904) the bird is reduced to subspecific rank because it was found to intergrade with *palustris*, and it is assigned to the genus *Telmatodytes*. This is based on Oberholser's report in the Proceedings of the Biological Society, Washington, Vol. 16, p. 149, 1903.

In 1906 (*Auk*, Vol. 23, p. 67) Wayne's article on South Carolina Birds entered a protest against his Atlantic Coast "*marianae*" being reduced to subspecific rank, and took issue with Bangs as to the non-migratory character of the Floridian *marianae*. Wayne was firmly of the opinion that the Florida birds were migratory and inseparable from the South Carolina birds which he reported in 1899.

Our next references, chronologically taken, are in reports of several Christmas censuses made at Palma Sola, near Bradenton, in Manatee County, Florida. The first of these was by Eleanor Earle, in 1908; the others by Carlos Earle, in the years 1909, 1910, and 1912, respectively. These reports appear in order in *Bird Lore*, Vol. 10, p. 33; Vol. 11, p. 28; Vol. 12, p. 30; and Vol. 14, p. 33. Two birds were observed in each census taken, except that of 1912, when three birds were noted, making a total of nine birds for the four years. If the identifications are correct, the range of Marian's Marsh Wren is carried considerably farther south of the type locality. Whether these birds were only straggling migrants, or individuals belonging to wintering flocks, is not apparent; but since they were observed for four winters during a period of five years the presumption is that they were regularly wintering in the region.

In 1919, "John Williams"² published a paper on the birds of Wakulla County, Florida, in the *WILSON BULLETIN* (Vol. 31, p. 56) in which he listed Marian's Marsh Wren as abundant in the broad salt-water marshes of the coast. In the following year he again listed Marian's Marsh Wren in his "*Notes on the Birds of Wakulla County, Florida*" (*WILSON BULLETIN*, Vol. 32, p. 56).

In 1924, Frank M. Chapman, in the revised edition of his "*Handbook of the Birds of Eastern North America*", p. 481, published the

²The *nom de plume* of C. J. Pennock. For a time he was a resident of St. Marks Lighthouse, in Wakulla County, Florida, where his observations were made.

winter range of Marian's Marsh Wren as (in part) the west coast of Florida.

In 1926, William G. Fargo, in his "Notes on the Birds of Pinellas and Pasco Counties, Florida" (WILSON BULLETIN, Vol. 38, p. 155) reported Marian's Marsh Wren as abundant in the salt marshes west of Elfers. This locality is indicated on the map. Mr. Fargo further stated that male birds were singing "vigorously" on April 5, which would almost certainly identify the habitat as a preferred breeding area.

In the same year, 1926, Worthington and Todd (WILSON BULLETIN, Vol. 38, p. 228) reported Marian's Marsh Wrens in the marshes of Choctawhatchee Bay, which is mostly in Walton County, one of the West Florida counties. They state that a pair of these wrens were shot on April 18, presumably of that year; but they state also that "these birds" (meaning probably similar specimens) were examined some years previous to that time by Dr. Harry C. Oberholser and identified as Marian's Marsh Wren. They do not state whether the birds Oberholser had in hand came from Choctawhatchee Bay region or not.

Mr. Francis M. Weston, in a letter under date of June 29, 1931, states that Marian's Marsh Wren cannot be listed from the Pensacola region, except as a winter visitor.

In a letter from Mr. C. J. Pennock under date of July 7, 1931, Marian's Marsh Wren is reported as having been taken on April 13, 1921, at Punta Gordo, in Charlotte County, Florida. Evidently more than one species of marsh wren is found at this season in this locality. On April 11, 1923, Mr. Pennock reports finding a nest of Marian's Marsh Wren about a mile from Punta Gordo, "up Peace River". The nest was new, and nearly completed. Mr. Pennock states that there are abundant marshes along the tidal creeks of Charlotte Harbor, but he does not know what marsh wrens could be identified as breeding in them. Perhaps this single nest, at that time unoccupied, and without a specimen of the bird, would be insufficient to base any conclusion on, but it would not be surprising to learn that even this southernmost section of the range of *marianae* is also a breeding habitat.

As to the breeding range of Marian's Marsh Wren in Florida, Mr. Donald J. Nicholson, of Orlando, Florida, in a letter under date of May 23, 1931, furnishes me some very interesting facts:

"I do not know just how far north along the Gulf Coast this species breeds, but it is found west and southwest of New Port Richey, Pasco County, Florida, and breeds in late April through June, and probably a few continue into July.

"The birds in this vicinity (New Port Richey) nest among *Juncus* (*J. roemerianus*), a sharp-pointed rush, and principally in mangrove trees from five to fourteen feet above the mud in salt marshes. The tree-nesting may seem strange to you and it was quite a surprise to me when I found them nesting under such odd circumstances. I think high water and rats had something to do with this nesting custom here, and it may be a comparatively recent habit. The sets range from three to five, but sets of five are not as commonly found as the smaller sets.

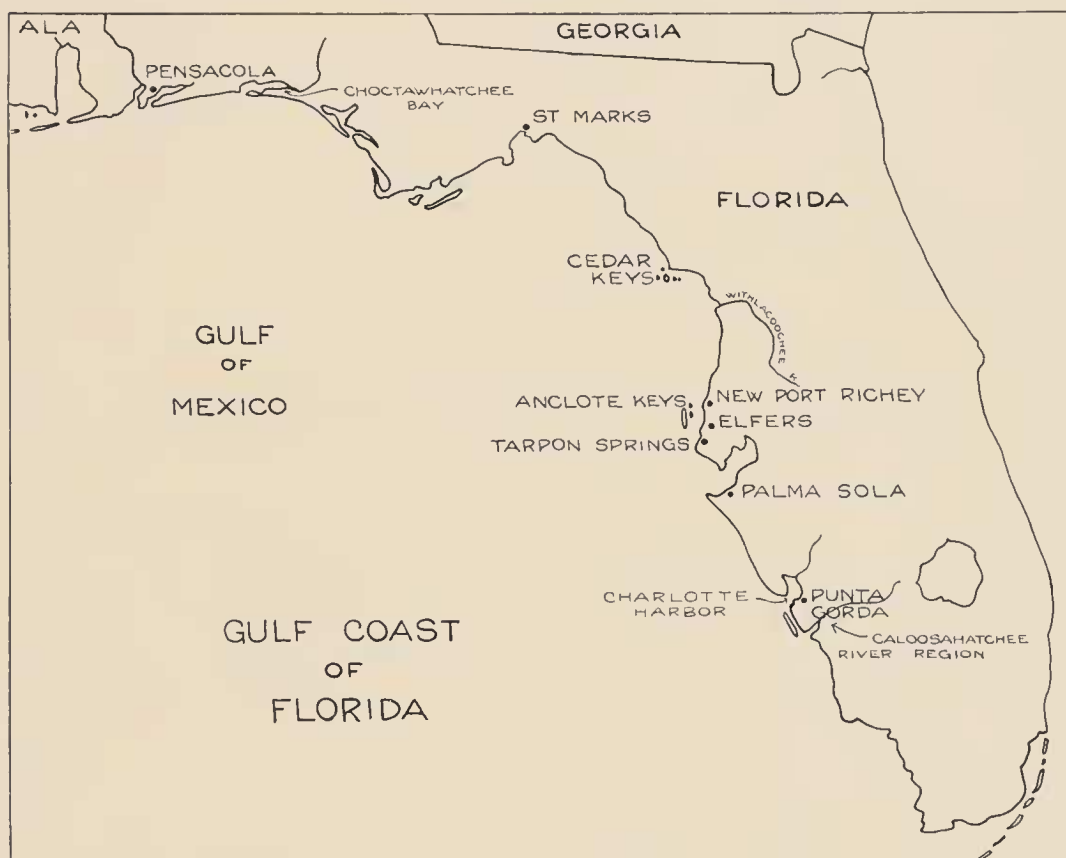


FIG. 49. The Gulf Coast Range of Marian's Marsh Wren.

"The bird may nest anywhere along the Gulf Coast in suitable marshes and it should be found at or in the vicinity of St. Marks, and at New Port Richey was found within a few yards of the open Gulf. This latter point may aid you in looking for nests".

The following facts are also derived from the notes of Nicholson, and constitute the only information we have concerning the construction of the nest of Marian's Marsh Wren and the character of the eggs.

The nest of *marianae* does not differ from that of *griseus* (which does not occur on the Gulf Coast) either as to materials used in its construction or as to size and appearance. On the inside, and on a level with the entrance, there is a small shelf or platform, extending a

little on each side of the entrance, and so constructed that it is impossible for the eggs to roll out, or for them to be blown out when the nests are swayed by the stiff sea breezes. In collecting the nests and eggs it is necessary to turn the nest upside down, allowing the eggs to roll around to the top and down on the smooth side of the nest to the opening at its upper side. Only in this way can the nest be taken without injuring the little interior projection below the entrance. This peculiarity in the construction of the nest is found also in the nest of *griseus*. Nests of *marianae* found in mangrove trees were fastened to the forks of small limbs, generally at their ends, or in the tops of small mangrove bushes.

The top of the nest is usually larger than the bottom, and in a majority of nests examined, the opening is about one-third of the way from the top. The entrance to the nest is so small that it is with difficulty located, especially in the case of those newly constructed. Occupied nests are lined with soft shredded grasses, and sometimes with feathers, and they are so cleverly woven together that they are a complete protection against rain. None have even been found that were damp inside. Although the marsh wrens nest in colonies, the nests of *marianae* are seldom less than forty feet apart. On the east coast of Florida Nicholson counted four to six "dummy nests" to every occupied nest of *griseus*; but in the colonies of *marianae* on the west coast near Elfers, he found only one or two bachelor nests to one that was occupied.

The male bird is invariably found singing near the occupied nest, either in the same tree, or in the grass very close by. He is the collector's best guide to the location of the nest. The females are so suspicious that they never have been observed to enter or to leave the nest. Mr. Nicholson once touched a nest with young birds in it, and they darted out like winged bullets. It is probable that when they are able to leave the nest they can fly and do not return to it. The collector may actually take the nest and eggs in the presence of the male, who continues to sing undisturbed only a few feet away.

The males of both *marianae* and *griseus* sing so much alike that they could not be identified by this test, although slight differences in their songs not easily remembered might differentiate them if they could be heard singing in the same locality. The song is delivered in the same manner by both wrens.

The eggs of Marian's Marsh Wren are identical in size, shape, and color with those of Worthington's Marsh Wren. There is much variation in color, however, some eggs being quite pale, but most of

them being of a deep rich chocolate brown. In some sets the eggs are without darker capping or wreathing of brown dots at the larger end. When the eggs are wreathed, which is true of a majority of sets examined, the dots are generally confluent. The eggs are sometimes glossy, always thick-shelled, and not easily broken in handling.



FIG. 50. Map showing the cruise of The Osprey in search of Marian's Marsh Wren.

In all these respects the eggs of Worthington's Marsh Wrens are the same.

II. MARIAN'S MARSH WREN IN ALABAMA

On our survey of the coastal region of Alabama we found no clue to the location of breeding marsh wrens until we got to Bayou La Batre. Mr. Willie Collier, an observant young fisherman, told us that he had seen plenty of "Grass Wrens" on Marsh Island, and at

Berron Point on Mon Louis Island.³ A careful search through the marshes of Marsh Island gave negative results; for here, as elsewhere, the grass had been burned, creating situations that could have no appeal to marsh-loving wrens.

In addition to the frequent damage done to the grass by fires, marsh wrens must suffer many indignities from rats and mice, which are abundant in all salt marshes. Other birds, such as Fish Crows and hawks, probably invade their breeding grounds. High winds and tides doubtless wreck many of their nests. Should young birds climb out of the nest before they can manage themselves in the thick vegetation, or use their wings, they can but fall victims to their enemies.

As a further discouragement to the birds we found on Dauphin Island, whose former bars and sand spits are now continuous with the inhabited section, herds of cattle grazing over vegetation that seemed to offer the poorest prospect for a living. Many of the nesting colonies of terns and gulls, as well as those of Florida Nighthawks, must be repeatedly broken up by these cows. We saw some nests of Least Terns, Black Skimmers, and Florida Nighthawks, the eggs of the latter being laid almost in the trails of ranging cattle. On Petit Bois Island, which lies west of Dauphin, and which is uninhabited, immense colonies of terns and gulls formerly nested; but now wild hogs threaten the extermination of all ground-nesting birds. Petit Bois Island is partly in Alabama and partly in Mississippi. We learned that somewhat recently hunters from the mainland have been making raids on the hogs, since they are at least good for food. This commendable poaching, if we should call it that, may be the salvation of the birds at last.

Berron Point, although ideally adapted to the needs of the marsh wrens, yielded only a few singing birds but no evidence of their nesting. They were evidently on territory accepted as their own, but their nesting sites had been destroyed by the fires that the boys had kindled to aid them in finding the nests of Clapper Rails and Florida Gallinules. Roasted eggs of marsh birds may be a great delicacy for the "egggers", but they are a costly one if we consider the interests of Seaside Sparrows, marsh wrens, and Florida Redwings, to say nothing of the ground-nesting gallinules and rails.

³In a letter, dated July 13, 1931, Mr. Collier enclosed a sketch map showing the following localities in which at various times in season he had found marsh wrens breeding: Marsh Island: Isle aux Herbes, east coast near the middle of the island; Pass o' Barrow, local name for Berron Point of Mon Louis Island; and the marshes of Fowl River, which are some distance north of Berron Point, in Mobile County. See map.

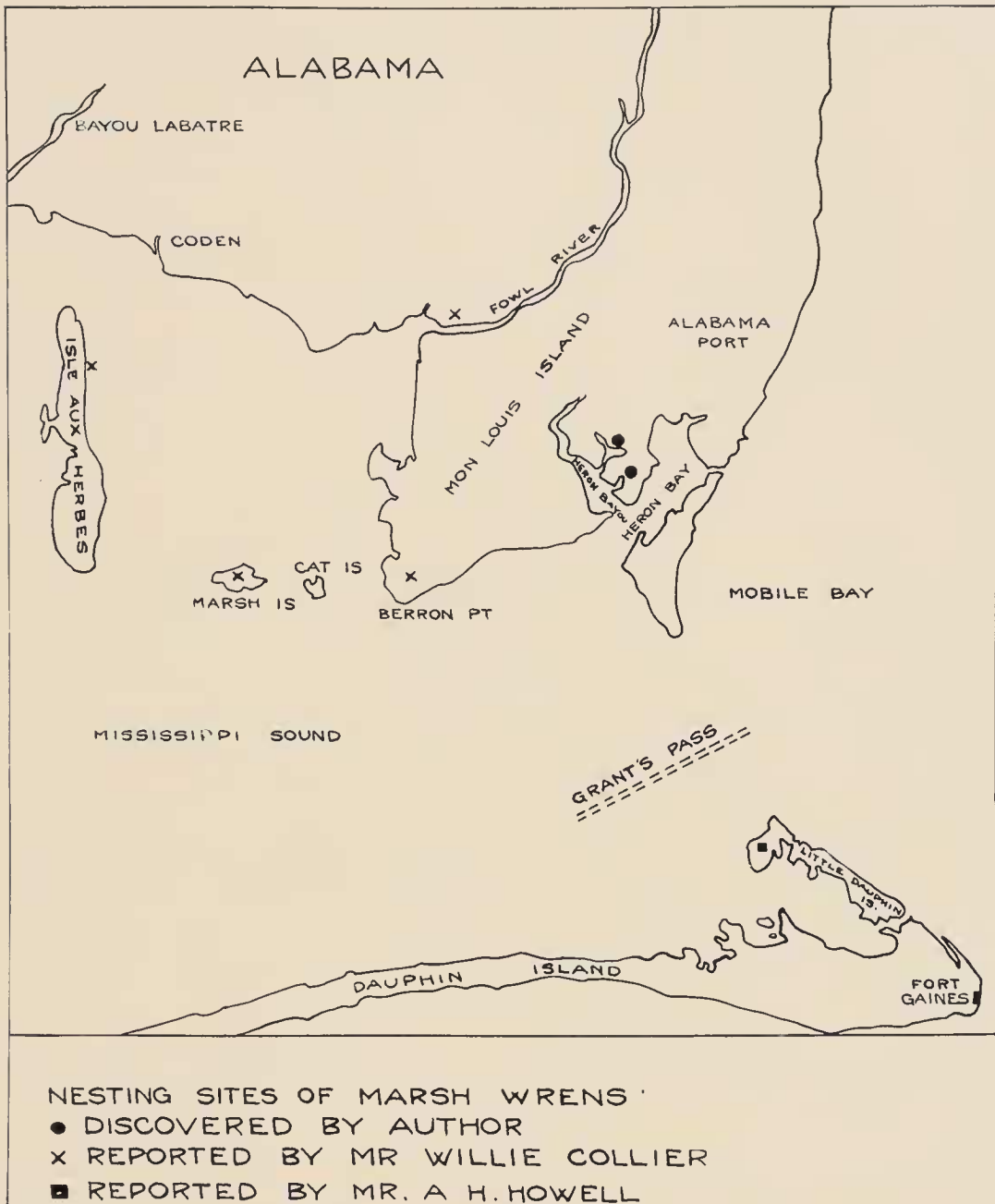


FIG. 51. Map showing known distribution of Marian's Marsh Wren in Alabama.

We did find on a low platform, sheltered by the small vegetation of a narrow ditch, the nest of a Green Heron. The birds in it were old enough to fly, so that it was with some difficulty that we captured one of them to make sure of our identification. In the brackish waters of this region, especially on the margins of the muddy bayous, we found great numbers of mollusks; mostly *Littorinas*, *Neritinas*, and the common bivalve, *Mytilus*.

It was on the tidal flats, or rather monotypic marshes, of Heron Bayou that we found marsh wrens nesting, enough to satisfy the heart

of any ornithologist. This region of vast and almost impenetrable marshes is known to the fishermen as West Heron Bay. Several narrow bayous penetrate the grass-grown region, one of them widening into a so-called lake. In such a region, in the tall bladed grasses, which grow higher than the rushes, and nearer open water, we found the marsh wrens numerous. They were singing near their neatly built nests, their entrancing songs being much in the tempo of the songs of the Prairie Marsh Wren.

It is not difficult to identify these marsh wrens, for their darker colors, especially those underneath, are good field marks. In hand, the birds had the characteristic black spots, which were obscured but little by the lighter markings of the feathers on the breast.

Contrary to our expectation, we did not find these wrens particularly shy.⁴ The breeding birds were very easy to approach; and though they did not remain long on open perches they seemed quite unmindful of our invasion of their territory, singing joyously all the while, and often within two or three feet of us. Often and again the males would reappear and perch in plain view on the side of the tallest reed, and that without interruption of their song. If we could have walked through the thick vegetation at low tide with a Graflex camera, we might have gotten pictures of the birds in action. It was slow, sloppy work at best, getting into the habitats of the birds, especially when we left the skiff. Without doubt the search for nests developed that type of patience and perseverance which all members of our party came prepared to supply. At high tide, when a few pictures were taken of a nest and the habitat, a platform was improvised with life preservers spread over downturned rushes in order to give the camera tripod a footing. By this device a sufficiently good elevation was obtained for photographic work.

The nest of Marian's Marsh Wren differs in no essential way from the nest of other closely-related species or subspecies. It is globular in shape, well secured to the taller marsh grasses, and usually about two or three feet above high tide. Oftentimes the nest can be detected from a moving skiff. The bachelor nests, which are unlined, are in the proportion of four or five to one which is lined and occupied. One nest contained remains of eggs already hatched, which eggs were, as

⁴"This tiny wren is inconspicuous and easily overlooked by reason of its secretive habits. It dwells exclusively in the wet salt marshes, hiding most of the time in the dense tangle of rushes and marsh grass. . . . But usually the birds are very difficult to detect as they flit about under cover of the rank vegetation." Howell, *Birds of Alabama*, p. 338. Perhaps Howell intended this description to apply to individuals under observation in seasons other than the breeding season.

far as color is concerned, like those of *Telmatodytes p. palustris* or *T. p. griseus*. We were unable to secure more data on the eggs, since all of the nests examined either had young birds in them, or were empty. Many young birds were, at this time (June 18) old enough to fly.

Mrs. Edwards banded one of these half-grown birds, this making the first instance, as far as I can learn, of the banding of a Marian's Marsh Wren in Alabama. She also banded five birds, which were taken from the nest. This nest was located about three feet above the water (high tide) on the margin of one of the smaller bayous leading off from Heron Bayou. After the birds were banded the nest was photographed.

The beginning of the nesting season, estimated by the conditions as we found them, is probably May 20, perhaps even earlier. In all probability the season continues well into June. We could not tell whether the birds raise more than one brood or not. If so, the second nestings can hardly be dated earlier than the middle of June.

Marian's Marsh Wren cannot be reported as a rare bird in the locality cited above. It is evidently abundant in the region where it was first discovered, Pasco and Pinellas Counties, Florida, but it remains to be ascertained whether it is more than a casual visitor, or resident, in many of the localities shown on the map and listed in the table. We did not visit the extensive marshes at the head of Mobile Bay, which belong to the delta of the Alabama and Tombigbee Rivers, whose larger channels are known as Mobile River and Tensaw River, respectively. In exploring this section during the breeding season, Howell found the wrens abundant, but though he saw nests he found none that were occupied. Since he recorded the wrens as present in this region during the winter, it is evident that they are permanent residents in this part of Alabama. Howell states that Gutsell found the birds in winter near Orange Beach, and that he himself found them in the same region on the Gulf at Bon Secour. Howell further reports finding a Marian's Marsh Wren, but no nests, on Little Dauphin Island⁵, in June. He did not find the species in the marshes about Bayou La Batre or on Grand Batture Island.

⁵At the time Howell visited Dauphin Island, it was broken in many places by bars and channels, which still appear in the official maps of that region. At this writing the island is continuous from end to end, a distance of fourteen miles, and is seldom overflowed by tides except in a season of storms. Little Dauphin Island is a much smaller island lying north of the eastern section of Dauphin Island.

It becomes apparent that the territory of *marianae* is almost continuous from the head of Mobile Bay and the coastal and island marshes of Alabama to Manatee County, Florida, wherever suitable habitats are available. The Caloosahatchee region, reported by Scott as a winter home for this species, is a considerable distance from the localities in which it is abundant; but whether the birds are only migrants or regular winter visitors in this region cannot be confidently stated.

The accompanying map correlates these several reports and indicates the need of careful observations of *marianae* all along the Florida Gulf Coast, both in the breeding season and in the winter. It can thus be stated, with some confidence, that Marian's Marsh Wren is a permanent resident of the coastal marshes of Alabama and Florida all the way from Isle aux Herbes and upper Mobile Bay to New Port Richey in Pasco County, Florida* ; and that it is a migrant, or a winter visitor, in Manatee County, and in the Caloosahatchee River region.

III. MARIAN'S MARSH WREN ON THE ATLANTIC COAST

Our next problem will be to examine the records which mention Marian's Marsh Wren as an inhabitant of the Atlantic seaboard.

In 1891, Robert Ridgway's paper, entitled *Cistothorus Marianae . . . in South Carolina*, appeared in the *Auk* (Vol. 8, p. 240). This record, however, must be referred to *griseus*, a subspecies described by Brewster in 1893. (See *Auk*, Vol. 10, p. 218). In the *Birds of South Carolina*, by Wayne (1919, p. 187), in the discussion of Worthington's Marsh Wren, this correction is made. The report of Marian's Marsh Wren from Sapelo Island, Georgia, made by Brewster (*Auk*, Vol. 5, p. 432, 1888), is also corrected to read *griseus*. Mr. Wayne adds: "There is no evidence that *griseus* interbreeds with *marianae*, and I think it should be given full specific rank".

Since Wayne was fully acquainted with *griseus* from his boyhood, this statement has a significant bearing on the disposition of the (so-called) *marianae* in South Carolina; for if *marianae* cannot be admitted as a valid species for the Atlantic seaboard may not these so-called *marianae* be another form of *griseus*, or more probably an unnamed species similar to the true *marianae* but having a range altogether different?

In 1899, Arthur T. Wayne published in the *Auk* (Vol. 16, pp. 361-362) his article entitled, "Notes on Marian's Marsh Wren (*Cistothorus Marianae*) and Worthington's Marsh Wren (*Cistothorus palustris*)

*South of Pasco County marshes are scarce, and this explains the absence of marsh wrens.

griseus)". Several statements made in this account focus on our investigations:

1. Wayne reports taking a wren near Mt. Pleasant, S. C., on April 16, 1897, which Ridgway declared was an intermediate form between *marianae* and *griseus*, but which he considered finally as "an exceptionally dark specimen of *griseus*".

2. The same specimen, when examined by Brewster was confidently identified as *marianae*.

3. Both of these authorities had before them a series of specimens, in which both *griseus* and *marianae* occurred.

4. Accepting as valid the opinion of Brewster, Wayne claimed this record was the first to extend the range of the species "to the Atlantic Coast".

5. Wayne then followed with the statement that Marian's Marsh Wren was an abundant bird in South Carolina "during the migration" season, giving dates upon which he had collected specimens; namely, from October 4 to May 8. He further stated that "this wren does not breed anywhere near Mt. Pleasant, but is simply a migrant".

Wayne further predicted the breeding range of Marian's Marsh Wren on the coast of North Carolina!

7. When Wayne took notice of Mr. T. Gilbert Pearson's report in the July issue of the *Auk* (Vol. 16, p. 250, 1899) a specimen collected at Beaufort, N. C., had been identified as *griseus* by Mr. Ridgway. When, however, Wayne received this specimen from Pearson, he declared it to be a typical example of *marianae*.⁶

Apparently nothing more developed in the situation until 1910, when Wayne published his "*Birds of South Carolina*", on pp. 188, 189 of which he reviews the history of the species. He states with confidence that the breeding range of *marianae* does not include Florida, "as Scott supposed", but that it is North Carolina. He does not admit South Carolina as other than a migrant range for *marianae*, but at this point a curious situation is discovered. A male and female wren, identified as Marian's Marsh Wren, taken in 1896 in South Carolina, are described as being *much darker above and below than specimens of the same species taken in Florida*. The North(?) Carolina specimens, on the contrary, are described as normally lighter than those from Florida!

In view of these statements we infer that the Atlantic Coast birds are *not* migrants from Florida, nor can they be identified as Marian's

⁶The reference of Bishop in the *Auk* (Vol. 16, p. 268, 1901) to the marsh wren that he took on Pea Island in North Carolina in February, 1901, must, of course, be referred to *griseus*.

Marsh Wrens. We are forced to the conclusion, previously expressed, that they will classify as a form of *griseus* or as a new species.

A factor in reaching this conclusion appears in Wayne's own statement that Marian's Marsh Wrens reach the vicinity of Charleston, S. C., *about the second week in September and that they remain until about the first of November*. Either he was under the impression that these migrants passed through South Carolina *from* Florida on their way to North Carolina, or that they were migrants from North Carolina on their way *to* Florida. Apparently it did not occur to him that they might be migrants from North Carolina which winter on the Atlantic Coast, some of them in the vicinity of Charleston, but the majority finding more congenial winter homes either north or south of Charleston. The evidence is that these birds do not migrate *to* Florida, or *from* Florida.

If we accept the theory that Marian's Marsh Wren migrates from Florida to, or through, South Carolina *after the breeding season*, we shall have a new factor to deal with in the general problem of migration. Why is it that there are no families of birds that feature a northbound migration in search of a winter home? In some families, individuals or flocks may wander about for a time in almost any direction; but the birds that are given to such wanderings are, as a rule, permanent residents of the region. Among such wanderers are some species of herons and some birds of prey. The Pine Warbler is a striking illustration of this roaming habit.

The predilection for a winter home south of the breeding range applies not only to birds of the Northern Hemisphere, but it is apparently not reversed in the case of migratory birds in the Southern Hemisphere. It is impossible to be dogmatic on this point. The only thing that can be said is that there are available no records that contradict this supposition, neither in the keeping of the Biological Survey in Washington, nor in the literature of migration, as far as we have been able to examine it. Correspondence with ornithologists in Africa, Australia, and South America has not shed much light on the subject. There are surely some South African species that nest in the palaeartic regions, and migrate after the nesting season northward, but we are waiting confirmation of this assertion. Then there are birds which migrate in more or less of an easterly or westerly direction, but their choice of a winter home is generally in a latitude south of their breeding grounds.

This digression has little bearing on the discussion of Marian's Marsh Wren. However, it would be a most interesting thing if this

species could be the first one among migratory birds of North America to be reported as immediately seeking a northern clime for its winter home after the nesting season. There are accumulating reasons for making the supposed Marian's Marsh Wren of the Atlantic Coast a different bird from the Marian's Marsh Wren of the Gulf Coast, and for believing that the latter is a permanent resident in most of the marshes where it is found, migrating perhaps from some of its breeding habitats in Florida to the more southern Caloosahatchee River region.

In 1924, Dr. Frank M. Chapman, in the revised edition of his *Handbook of the Birds of Eastern North America*, p. 481, states that the breeding range of Marian's Marsh Wren is the coast of North Carolina, and that it winters in South Carolina and along the west coast of Florida. In variance with this statement he gives a breeding record for the species on the *east* coast of Florida: "Mantanzas Inlet, May 24". Chapman writes me that this record, however, can not now be traced. He further states that the Atlantic Coast species will have to be referred to *griseus*, which opinion I had already put in writing before receiving his letter.

Under date of June 30, 1931, I received a letter from Mr. A. H. Howell, in which he says:

"There is considerable doubt regarding the Atlantic Coast records of *marianae*, and quite likely these birds may prove to be a distinct race".

Following this came a letter from Dr. Chapman, under date of July 13, 1931, in which he says:

"In my letter of July 6th, the range of *marianae* was given from galley proofs of the forthcoming A. O. U. Check-List. On July 11th I received page proofs of this book, and therein the ranges of *griseus* and *marianae* are given below:

griseus: Lower Austral Zone in the South Atlantic coast region from South Carolina to northern Florida.

marianae: Gulf Coast from Charlotte Harbor,⁷ Florida, to Mississippi.

This seems to be a more logical distribution".

In other words, the range of these two wrens as given in the forthcoming Check-List compares very well with the range which we have worked out after a careful analysis of available records and correspondence with local observers. It will be noted that records for the east coast of Florida do not materialize in the case of *marianae*.

⁷Charlotte Harbor lies in Charlotte and Lee Counties, Florida, a little north of the Caloosahatchee River region, already treated in the text.

TABLE I
Range of Marian's Marsh Wren in Florida and Alabama.

<i>Region</i>	<i>County and State</i>	<i>Season</i>	<i>Observer</i>
Mouth Withlacoochee River	Citrus Co., Fla.	Winter	Scott
Caloosahatchee River Region	Lee Co., Fla.	Winter, Migrant	Scott
St. Marks	Wakulla Co., Fla.	Winter	"Williams"
Elfers	Pasco Co., Fla.	Breeding	{Fargo {Donaldson
Choctawatchee Bay	Walton Co., Fla.	Breeding	{Worthington {and Todd
Pensacola	Escambia Co., Fla.	Winter	Weston
Tarpon Springs	Pinellas Co., Fla.	{Winter {Breeding	{Scott {Donaldson
Mouth of Anclote River	Pinellas Co., Fla.	Winter	Scott
Anclote River to Cedar Keys	West Coast, Fla.	Winter	Scott
Cedar Keys	Levy County, Fla.	Winter	Scott
Palma Sola	Manatee Co., Fla.	Winter	{Earle, Eleanor {Earle, Carlos
New Port Richey	Pasco Co., Fla.	Breeding	Nicholson
Marshes Mobile River	Baldwin and Mobile Counties, Ala.	{Winter? {Breeding	Howell
Lower Tensaw River	Baldwin Co., Ala.	{Winter {Breeding	Howell
Orange Beach	Baldwin Co., Ala.	Winter	Gutsell
Bon Secours	Baldwin Co., Ala.	Winter	Howell
Little Dauphin Island	Mobile Co., Ala.	Breeding	Howell
Heron Bayou	Mobile Co., Ala.	Breeding	Whecler
Isle aux Herbes	Mobile Co., Ala.	Breeding	Collier
Marsh Island	Mobile Co., Ala.	Breeding	Collier
Berron Point, Mon Louis Island	Mobile Co., Ala.	Breeding	Collier
Marshes Fowl River	Mobile Co., Ala.	Breeding?	Collier
Salt Marshes	West Coast, Fla.	Permanent	Bangs
Punta Gordo	Charlotte Co., Fla.	Breeding?	Pennock
Charlotte Harbor	Charlotte Co., Fla.	{Winter {Breeding?	Pennock

The statements found in Bailey's "*Birds of Florida*" (p. 139) add nothing to our findings, and therefore can be neglected; similarly those in Pearson and Brimley's "*Birds of North Carolina*", since they apply either to *griseus* or to a new species.⁸

SUMMARY

With such meager records in hand it is presumptuous to go further than to suggest that the birds of the Atlantic Coast which have been reported under the name of *marianae* are a new species, differing from *griseus* sufficiently to make identification comparatively easy.

The territory of the two birds as far as breeding is concerned seems to be distinct, the range of *griseus* being South Carolina to Florida (east coast), that of the supposed *marianae* being North Carolina. *Marianae*, however, migrates to South Carolina in winter.

Marian's Marsh Wren is distinctly a salt-water species, for with the exception of Scott's record of 1890, it has never been reported on any fresh-water marshes. Even in this case the fresh-water marshes were not far from salt water.

Marian's Marsh Wren is a coastal species, being unknown in the interior, even as a migrant. It has never been reported farther inland than ten miles, and that by Scott, as given above.

The range of Marian's Marsh Wren is the Gulf Coast of Florida and Alabama.

Marian's Marsh Wren is apparently a permanent resident in most of the situations in which it has been found. This applies particularly to the extensive salt marshes in Alabama, such as are found in upper Mobile Bay; and to salt marshes of the Florida west coast, the center of which is the type locality of Tarpon Springs.

There are several localities along the west coast of Florida which Marian's Marsh Wren visits in winter, Pensacola and the Caloosahatchee River region in Lee County having been reported specifically.

The nesting habits of Marian's Marsh Wren do not differ from those of the Long-billed Marsh Wren as regards the nest and the size and number of eggs.

Marian's Marsh Wren usually chooses a situation in all respects similar to that preferred by other marsh wrens. It is the only marsh

⁸A letter from Mr. Brimley, under date of July 11, states that the only record for Marian's Marsh Wren that has been made since 1919 is a bird taken on July 17, 1929, at Beaufort, N. C. At this writing, Howell's "*Florida Bird Life*" is in press, and doubtless will add information based on his personal observations in that state.

wren,⁹ however, that resorts occasionally to trees, building in mangroves above the muddy marshes on the very margin of the open Gulf.

The nesting season of Marion's Marsh Wren extends from the middle of May well into July. It is not known whether more than one brood is raised.

Marian's Marsh Wren is so retiring in habit that it may be easily overlooked, especially in winter; but it is very confiding during the nesting season, the colony being readily located by the distinctive song of the male.

Marian's Marsh Wren, which presents so many interesting characteristics and problems, is confined to Alabama and Florida. It has never been reported from either Mississippi or Louisiana. It deserves protection throughout its range, especially from fires, which deprive it of indispensable shelter. While locally the birds are not rare, taken in all, the species must be considered as one of the rarest of the southern song birds.

The author acknowledges his obligations to many writers and correspondents mentioned in the text, and especially to Dr. R. M. Harper, of the Florida Geological Survey, for critical examination of the text, and to Mrs. Emily Willcoxson, assistant librarian of the Field Museum, for aid in searching the literature.

BIBLIOGRAPHY

1881. Scott, W. E. D. On birds observed in Sumpter, Levy, and Hillsborough Counties, Florida. *Bull. Nutt. Ornith. Club*, Vol. 6, pp. 14-21 (p. 15).
1888. Scott, W. E. D. Supplementary notes from the Gulf Coast of Florida, with a description of a new species of marsh wren. *Auk*, Vol. 5, pp. 183-188 (p. 188).
1888. Chapman, Frank M. Lists of additions to the North American avifauna and of eliminations and changes in nomenclature proposed since the publication of the A. O. U. Check-List. *Auk*, Vol. 5, pp. 393-402 (p. 400).
1888. Brewster, William. *Cistothorus palustris marianae* on the coast of Georgia. *Auk*, Vol. 5, p. 432.
- 1888-1890. Scott, W. E. D. A summary of observations on the birds of the gulf coast of Florida. *Auk*, Vol. 5, pp. 373-379; Vol. 6, pp. 13-18, 152-160, 245-252, 318-326; Vol. 7, pp. 14-22, 114-120 (p. 117).
1891. Wayne, Arthur T. Marian's Marsh Wren (*Cistothorus marianae*) on the coast of South Carolina. *Auk*, Vol. 8, p. 239.
1891. Ridgway, Robert. *Cistothorus marianae*, *Buteo lineatus alleni*, and *Syrnium nebulosum alleni* in South Carolina. *Auk*, Vol. 8, p. 240.
1892. Scott, W. E. D. Notes on the birds of the Caloosahatchee region of Florida. *Auk*, Vol. 9, pp. 209-218 (p. 214).
1893. Brewster, William. Description of a new marsh wren, with critical notes on *Cistothorus marianae* Scott. *Auk*, Vol. 10, pp. 215-219.

⁹Since this was written Donald J. Nicholson reports finding a Worthington's Marsh Wren's nest on the east coast of Florida situated in a small mangrove bush.

1899. Wayne, Arthur T. Notes on Marian's Marsh Wren, *Cistothorus marianae*, and Worthington's Marsh Wren, *Cistothorus palustris griseus*. *Auk*, Vol. 16, pp. 361-362. This paper announces the first supposed record for Marian's Marsh Wren on the Atlantic Coast.
1901. Bishop, Louis B. The winter birds of Pea Island, North Carolina. *Auk*, Vol. 18, pp. 260-268 (p. 268).
1902. Bangs, Outram. A new Long-billed Marsh Wren from eastern North America. *Auk*, Vol. 19, pp. 349-353 (p. 353). *Cistothorus marianae* Scott is here reported from the salt marshes of western Florida as "non-migratory".
1903. Twelfth supplement to the American Ornithologists' Union Check-List of North American birds. *Auk*, Vol. 20, pp. 331-368 (p. 357). This changes the name to *Telmatodytes marianae*.
1904. Thirteenth supplement to the American Ornithologists' Union Check-List of North American birds. *Auk*, Vol. 21, pp. 411-424 (p. 418). This reduces the rank to subspecies and changes the name to *Telmatodytes palustris marianae* (Scott). See Oberholser, Proc. Biol. Soc. Wash., XVI, 1903, p. 149.
1904. Ridgway, Robert. The birds of north and middle America. Part III, pp. 497-498.
1906. Wayne, Arthur T. A contribution to the ornithology of South Carolina, chiefly the coast region. *Auk*, Vol. 23, pp. 56-68 (p. 67).
1908. Earle, Eleanor P. The eighth Christmas bird census. *Bird-Lore*, Vol. 10, p. 33.
1909. Earle, Carlos. The ninth Christmas bird census. *Bird-Lore*, Vol. 11, p. 28.
1910. Earle, Carlos. Bird-Lore's tenth Christmas census. *Bird-Lore*, Vol. 12, p. 30.
1910. Wayne, Arthur Trezevant. Birds of South Carolina. Charleston, S. C., 1910. Pp. 188-189.
1912. Earle, Carlos. Bird-Lore's twelfth Christmas bird census. *Bird-Lore*, Vol. 14, p. 33.
1919. Williams, John (C. J. Penneck). The Gray Kingbird in Wakulla County, Florida. *WILSON BULLETIN*, Vol. 31, pp. 55-58 (p. 56).
1919. Pearson, T. Gilbert, C. S. Brimley, and H. H. Brimley. Birds of North Carolina. Raleigh, N. C. (Vol. IV, North Carolina Geological and Economic Survey), p. 319.
1920. Williams, John (C. J. Penneck). Notes on birds of Wakulla County, Florida. *WILSON BULLETIN*, Vol. 31, pp. 109-117; Vol. 32, pp. 5-12, 48-58 (p. 56).
1924. Chapman, Frank M. Handbook of birds of eastern North America. New York, 1924. P. 481.
1924. Howell, Arthur H. Birds of Alabama. Montgomery, 1924. P. 338-339.
1925. Bailey, Harold H. The Birds of Florida. Baltimore, Md. *T. p. griseus*, p. 138; *T. p. marianae*, p. 139.
1926. Worthington, W. W. and W. E. Clyde Todd. The birds of the Choctawhatchee Bay region of Florida. *WILSON BULLETIN*, Vol. 38, pp. 204-229
1926. Worthington, W. W. and W. E. Clyde Todd. The birds of the Choctawhatchee Bay region of Florida. *WILSON BULLETIN*, Vol. 38, pp. 204-229 (p. 228).
- (?).1931. Howell, Arthur H. Florida Bird Life. New York, N. Y. (In press).

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